

Author Index of Volume B 100

- Abaab, M., 202
 Agostiano, A., 75
 Aguir, K., 320
 Ahadian, M.M., 341
 Alfano, B., 22
 Altamura, D., 9
 Amao, Y., 347
 Amato, G., 205
 Amine, A., 117
 Ankara, Z., 240
 Antolini, F., 47
 Armentano, I., 33
 Asl Soleimani, E., 190
 Auret, F.D., 270
- Babudri, F., 17
 Balázs, J., 163
 Baratto, C., 261
 Bardeau, J.-F., 99
 Barillaro, G., 185
 Barolo, C., 107
 Bársony, I., 163
 Belhousse, S., 250
 Bendahan, M., 320
 Benounis, M., 1
 Bernini, R., 72, 143
 Beshkov, G., 352
 Bivolarska, M., 325
 Blo, M., 277
 Boarino, L., 205
 Bongiorno, G., 173
 Booksh, K.S., 439
 Borchardt, E., 151
 Borello, L., 107
 Borre, M., 298
 Boschetti, A., 177
 Boulmani, R., 320
 Bransalov, K., 325
 Breglio, G., 147
 Bruno, P., 126
 Bruzzi, M., 173
 Bunesco, M.-C., 151
 Butturi, M.A., 277
- Calvo-Marzal, P., 333
 Campopiano, S., 143
 Canevali, C., 228
 Cantalini, C., 33
 Capobianchi, A., 212
 Capone, S., 88, 177
 Carotta, M.C., 277, 283
 Caruso, B., 261
 Chaabouni, F., 202
 Chaillou, A., 99
 Chavoshi, M., 341
- Chen, P.-H., 401
 Chen, W., 195
 Cheraga, H., 250
 Chiari, M., 158
 Chumbimuni-Torres, K.Y., 333
 Chvojka, T., 246
 Cicala, G., 126
 Ciccarella, G., 88, 135
 Cioffi, N., 9, 17
 Cirillo, E.N.M., 212
 Colangiuli, D., 17
 Comini, E., 41
 Connolly, E.J., 216
 Contini, G., 131
 Convertino, A., 212
 Cornet, A., 256
 Correig, X., 221
 Corsi, F., 126
 Cova, S., 158
 Cozzoli, P.D., 75
 Cretich, M., 158
 Curri, M.L., 75
 Curulli, A., 65
 Cusano, A., 72, 147
 Cutolo, A., 147
- D'Acapito, F., 131
 Daftari, A., 315
 D'Amato, R., 131
 Davoli, I., 131
 de Oliveira Neto, G., 333
 de Saja, J.A., 60
 De Stefano, L., 168
 Deistung, K., 151
 Di Francia, G., 22
 di Stasio, S., 261
 Dian, J., 246
 Dickert, F.L., 112
 Djulgerova, R., 352
 Dorfman, S., 81
 Dragone, A., 126
- Edler, K.J., 107
 Eisele, I., 380
 Elyassi, B., 139
 Esfandyarpour, B., 190
 Evarestov, R.A., 81
- Faal-Rastegar, M., 315
 Famini, S., 190
 Fang, Q., 195
 Farella, I., 9
 Farinola, G.M., 17
 Fedtke, P., 151
 Ferreira, I., 236
- Ferroni, M., 41
 Fiorilli, S., 103
 Fissan, H., 283
 Fortunato, E., 236
 Fratoddi, I., 131
 French, P.J., 216
- Gabouze, N., 250
 Galliera, S., 277
 Ganjali, M.R., 315
 Garrone, E., 29, 103, 107, 205
 Gazda-Miarecka, S., 112
 Gentleman, D.J., 439
 Geobaldo, F., 29, 99, 205
 Ghioni, M., 158
 Ghorbani, M., 315
 Giangregorio, M.M., 17
 Giberti, A., 277
 Gimenez, G., 463
 Gondek, L., 352
 Gramm, A., 240
 Griss, P., 463
 Groeneweg, J., 216
 Guadarrama, A., 60
 Guidi, V., 41, 277, 283
 Gupta, B.D., 423
- Halikias, K., 112
 Hattori, A., 455
 Hayes, M., 270
 Heifets, E., 81
 Höehr, N.F., 333
 Holloway, J.R., 439
 Holzhuetter, G., 298
 Hubalek, J., 221
- Iannotta, S., 177
 Imato, T., 450
 Inoue, M., 209
 Irace, A., 147
 Irajizad, A., 341
 Ishiwata, S., 455
 Ivanov, P., 221
 Izu, N., 395, 411
- Jaffrezic-Renault, N., 1
 Jelínek, I., 246
 Jiang, K., 195
 Jindřich, J., 246
 Joubert, P., 99
- Kammerer, T., 240
 Kawasaki, H., 266
 Kennedy, M.K., 283
 Kenny, J.M., 33
- Khodadadi, A., 139, 190
 Kim, D.-K., 432
 Kim, N., 432
 Kloul, M., 99
 Koike, K., 209
 Komuro, T., 209
 Kotomin, E.A., 81
 Kruis, F.E., 283
 Kubota, L.T., 333
 Kuzmarskytė, J., 387
- La Ferrara, V., 22
 Lee, D.-S., 401
 Lee, T.-M., 401
 Legodi, M.J., 270
 Leo, G., 75
 Li, F., 195
 Li, S., 195
 Li, Y.X., 94
 Lieberzeit, P., 112
 Liess, H.-D., 380
 Lin, C.-W., 401
 Llobet, E., 221
 Loffredo, F., 22
 Lorenc, M., 246
 Losacco, A.M., 126
 Lozzi, L., 33
- Macquarrie, D., 103
 Maffei, T.G.G., 283
 Maier, J., 81
 Malagù, C., 277, 283
 Malinauskas, A., 387
 Malysz, K., 221
 Manera, M.G., 75
 Mann, K.-J., 112
 Mari, C.M., 228
 Marian, S., 380
 Martinelli, G., 277, 283
 Martins, R., 236
 Matsubara, I., 395, 411
 Matsumoto, K., 450
 Mattoni, M., 228
 Melin, J., 463
 Meškys, R., 387
 Meyer, W.E., 270
 Micheli, A.L., 291
 Miglio, S., 173
 Mihailov, V., 352
 Milani, P., 173
 Miura, N., 450
 Mobilio, S., 131
 Moghimi, A., 315
 Mohajerzadeh, S., 190
 Mohajerzadeh, S.S., 139

- Morante, J.R., 256
 Morazzoni, F., 228
 Moretti, L., 168
 Moriguchi, H., 455
 Murayama, N., 395, 411

 Nakamura, N., 347
 Nannini, A., 185
 Naso, F., 17
 Neff, H., 298
 Nel, J.M., 270
 Nodari, L., 228
 Norouzi, P., 315

 Obando, L.A., 439
 Ogata, K., 209
 Ohshima, T., 266
 Onida, B., 103, 107
 Onischuk, A., 261
 Orlanducci, S., 65, 117
 Otero Areán, C., 107
 Outamzabet, R., 250
 Owen, G.T., 283

 Pallaoro, A., 177
 Palleschi, G., 65, 117
 Paoletti, C., 65
 Park, I.-S., 432
 Pedersen, H.C., 298
 Penza, M., 47
 Petrovic, Z.j., 352
 Pham, H.T.M., 216
 Picozzi, S., 33
 Pieri, F., 185
 Pietrzak, M., 151

 Piga, M., 277
 Pirasteh, P., 99
 Piseri, P., 173
 Podesta', A., 173
 Polzonetti, G., 131
 Popova, L., 352
 Prásek, J., 221

 Quercia, L., 22
 Quinto, M., 9

 Rahimi, F., 341
 Rajabbeigi, N., 139
 Ramanavičius, A., 387
 Ramesh, U., 401
 Rech, I., 158
 Rella, R., 75, 88, 135
 Rendina, I., 168
 Restelli, A., 158
 Rezig, B., 202
 Rivolo, P., 29, 99, 205
 Rodríguez-Méndez, M.L., 60
 Rossi, A.M., 168
 Roxhed, N., 463
 Ruffo, R., 228
 Ruiz, A.M., 256
 Russev, S., 325
 Russo, M.V., 131
 Russo, U., 228

 Sabbatini, L., 9, 17
 Sacerdoti, M., 277
 Sahimi, M., 139
 Salvador, G.P., 205
 Santucci, S., 33

 Sarro, P.M., 143, 216
 Sasa, S., 209
 Sberveglieri, G., 41, 261
 Scaringella, M., 173
 Schütze, A., 240
 Scotti, R., 228
 Seguin, J.L., 320
 Shankaran, D.R., 450
 Sharma, A.K., 423
 Shin, W., 395, 411
 Siciliano, P., 75, 88, 135, 177
 Somekh, M., 325
 Spadavecchia, J., 88, 135
 Stemme, G., 463
 Strambini, L.M., 185
 Su, P.-G., 417
 Su, X., 309
 Suda, Y., 266
 Szytula, A., 352

 Tanese, M.C., 17
 Tanite, T., 209
 Taurino, A.M., 177
 Terranova, M.L., 65, 117
 Thirstrup, C., 298
 Toccoli, T., 177
 Toko, K., 450
 Torsi, L., 9, 17
 Tóth, A.L., 163
 Trinchi, A., 94
 Tsai, W.-Y., 417
 Tsiulyanu, D., 380

 Ueda, T., 266
 Ugliengo, P., 29

 Valentini, A., 9, 212
 Valentini, F., 65, 117
 Valentini, L., 33
 van der Wijngaart, W., 463
 Vasanelli, L., 75
 Vasapollo, G., 135
 Velinov, T., 325
 Vendemiati, B., 277
 Vengatajalabathy Gobi, K., 450
 Verucchi, R., 177
 Vilanova, X., 221
 Vittori Antisari, M., 47
 Volk, J., 163
 Vrkoslav, V., 246

 Ward, M.C.L., 359
 Wharton, C.W., 359
 Wienecke, M., 151
 Wilks, S.P., 283
 Wlodarski, W., 94
 Wong, S.H., 359
 Wu, J., 195
 Wu, L., 270
 Wu, M.-C., 291
 Wu, M.-H., 401

 Yano, M., 209
 Yasuda, K., 455

 Zambonin, P.G., 9, 17
 Zeni, L., 143
 Zhang, J., 195, 309
 Zong, W., 298
 Zotti, L.A., 17

Subject Index of Volume B 100

- Ab initio and semi-empirical calculations
Thin oxide films; LaMnO_3 ; Atomic and electronic structure (Heifets, E. (100) 81)
- Absorption
Optical fiber; Surface plasmon resonance; Sensor (Sharma, A.K. (100) 423)
- a-C:H films
STW resonator; Relative humidity sensor; Polymeric HMDSO (Bruno, P. (100) 126)
- Adsorption
Porous silicon; Gas sensor; FTIR spectroscopy; Conductivity (Geobaldo, F. (100) 205)
- Adsorption
Zinc oxide; Microstructure; Gas sensor (Chaabouni, F. (100) 202)
- Agar microchamber
Dual wavelength photo-thermal etching; 1480/1064 nm infrared focused beam; Flexible change of structure (Hattori, A. (100) 455)
- Al electrodes
Humidity sensors; Porous SiC (Connolly, E.J. (100) 216)
- Alcohol substances
Gas sensor; Porous silicon; Polar molecules (Barillaro, G. (100) 185)
- Alkenes
Porous silicon; Surface functionalisation; FTIR spectroscopy; Hydrides (Geobaldo, F. (100) 29)
- Allergy
Surface plasmon resonance; Quartz crystal microbalance; IgE (Su, X. (100) 309)
- Aluminium film
Optical fibre; Kinetics of corrosion; Potentiometric measurements (Benounis, M. (100) 1)
- Ammonia
SBA-15; Reichardt's dye (Fiorilli, S. (100) 103)
- Anatase
Titanium dioxide; Lanthanum; Copper; CO; Gas sensor (Ruiz, A.M. (100) 256)
- Annealing
Chalcogenide semiconductors; Gas sensors; NO_2 ; Temperature (Tsiulyanu, D. (100) 380)
- Antibody and strain specificity
Characteristics; Label-free piezoelectric immunosensor; *Pseudomonas aeruginosa* detection (Kim, N. (100) 432)
- Anti-TNP antibody
Landmine; SPR immunosensor; 2,4,6-Trinitrophenol; Indirect competitive immunoreaction (Shankaran, D.R. (100) 450)
- ARROW
Integrated optical sensor; Refractometer; Silicon technology (Bernini, R. (100) 143)
- Atomic and electronic structure
Thin oxide films; LaMnO_3 ; Ab initio and semi-empirical calculations (Heifets, E. (100) 81)
- Automotive applications
Oxygen sensor; Solid-state reference; Ceria-zirconia (Rajabbeigi, N. (100) 139)
- Avalanche diode
DNA separation; Fluorescence; Single-photon (Rech, I. (100) 158)
- Beryllium-selective electrode
PVC membrane; Potentiometry (Ganjali, M.R. (100) 315)
- Biosensor
FET; ZnO ; ZnMgO ; MBE; Nitrogen doping (Ogata, K. (100) 209)
- Biosensor
Glucose dehydrogenase; PQQ; Nafion (Malinauskas, A. (100) 387)
- Biosensor
Surface plasmon; Diffractive optics; Injection moulding; Polymers (Thirstrup, C. (100) 298)
- Bismuth and copper oxides
Gas sensor; Screen-printing; Tin dioxide; Tungsten trioxide (Ivanov, P. (100) 221)
- Bragg reflector
Polymer composite; Swelling; Vapor solvent detection (Convertino, A. (100) 212)
- Calorimetric hydrocarbon sensors
Exhaust constituent sensors; Selective CO oxidation catalyst (Wu, M.-C. (100) 291)
- Carbon nanostructures
Polymer composites; Thin film gas sensors (Quercia, L. (100) 22)
- Carbon nanotubes
SAW chemical sensors; Vapour sensors; Selectivity (Penza, M. (100) 47)
- Carbon nanotubes
Sensors; Oxygen annealing; Raman spectroscopy; XPS (Valentini, L. (100) 33)
- Ceria
Oxygen gas sensor; Fast response; Thick film; Dynamic method; Response time (Izu, N. (100) 411)
- Ceria-zirconia
Oxygen sensor; Solid-state reference; Automotive applications (Rajabbeigi, N. (100) 139)
- Cerium oxide
Fast oxygen sensor; Pressure modulation spectroscopy (Shin, W. (100) 395)
- $(\text{CH}_3)_2\text{S}$
 CS_2 ; TiO_2 ; Mo; MoO_3 ; Ti; $\text{TiO} + \text{WO}_3$; $\text{TiO}:\text{W}$ (Comini, E. (100) 41)
- Chalcogenide semiconductors
Gas sensors; NO_2 ; Temperature; Annealing (Tsiulyanu, D. (100) 380)
- Characteristics
Label-free piezoelectric immunosensor; *Pseudomonas aeruginosa* detection; Antibody and strain specificity (Kim, N. (100) 432)
- Chemical sensors
Non-conventional conducting polymers; Nanotubules; Electrochemistry (Curulli, A. (100) 65)
- Chiral chemiresistors
Conducting polymers; Chiral sensors (Tanese, M.C. (100) 17)
- Chiral sensors
Conducting polymers; Chiral chemiresistors (Tanese, M.C. (100) 17)
- Chirped pulses
Fiber optic sensors; Multiplexing of sensors (Breglio, G. (100) 147)
- Colloidal nanocrystals
Thin films; Optical sensors; SPR (Manera, M.G. (100) 75)

- Colorimetric change
Optical CO₂ sensor; pH indicator; Porphyrin; α -Naphtholphthalein (Amao, Y. (100) 347)
- Composite material
Humidity sensor; Nano SiO₂; Poly(AMPS); Impedance analysis (Su, P.-G. (100) 417)
- Conducting polymers
Chiral sensors; Chiral chemiresistors (Tanese, M.C. (100) 17)
- Conducting polymers
Olive oil; Sensor; Electronic nose (Guadarrama, A. (100) 60)
- Conductivity
Porous silicon; Gas sensor; Adsorption; FTIR spectroscopy (Geobaldo, F. (100) 205)
- Congo Red
pH indicator; Porous silicon; Waveguides; Optical sensor (Rivolo, P. (100) 99)
- Continuous wavelength detection
RT-PCR; Spectrometer; Discrete channels fluorescence detection (Lee, D.-S. (100) 401)
- Copper
Titanium dioxide; Anatase; Lanthanum; CO; Gas sensor (Ruiz, A.M. (100) 256)
- CO
Titanium dioxide; Anatase; Lanthanum; Copper; Gas sensor (Ruiz, A.M. (100) 256)
- Coupled Fabry-Perot
Porous silicon multilayer; Microcavity; Nano-fluidics (Volk, J. (100) 163)
- Crystallization
SnO₂ sensor; Sol-gel; Thin film; Platinum micromachining; Spin-coating; Surface features (Esfandyarpour, B. (100) 190)
- CS₂
(CH₃)₂S; TiO₂:Mo; MoO₃:Ti; TiO + WO₃; TiO:W (Comini, E. (100) 41)
- Diffraction optics
Surface plasmon; Biosensor; Injection moulding; Polymers (Thirstrup, C. (100) 298)
- Dip-probes
Surface plasmon resonance, SPR; Fiber optic (Obando, L.A. (100) 439)
- Discrete channels fluorescence detection
RT-PCR; Spectrometer; Continuous wavelength detection (Lee, D.-S. (100) 401)
- DNA separation
Fluorescence; Single-photon; Avalanche diode (Rech, I. (100) 158)
- Double templates
Imprinting; Solvent detection; PAH detection; Surface imprinting; Virus analysis (Dickert, F.L. (100) 112)
- Dual wavelength photo-thermal etching
Agar microchamber; 1480/1064 nm infrared focused beam; Flexible change of structure (Hattori, A. (100) 455)
- Dye
Ordered mesophase; Hybrid material (Borello, L. (100) 107)
- Dynamic method
Oxygen gas sensor; Ceria; Fast response; Thick film; Response time (Izu, N. (100) 411)
- Dynamic operation
Micromachined gas sensor; Low power; Temperature cycling; Virtual multisensor system (Ankara, Z. (100) 240)
- Electrical properties
Nickel oxide; Zinc oxide; Rectifying junction (Nel, J.M. (100) 270)
- Electrical response
Nanocrystalline SnO₂; NO interaction; EPR spectroscopy; Mössbauer spectroscopy (Canevali, C. (100) 228)
- Electrochemical biosensors
Single wall carbon nanotube paste electrodes (Valentini, F. (100) 117)
- Electrochemistry
Non-conventional conducting polymers; Nanotubes; Chemical sensors (Curulli, A. (100) 65)
- Electronic nose
Conducting polymers; Olive oil; Sensor (Guadarrama, A. (100) 60)
- EPR spectroscopy
Nanocrystalline SnO₂; NO interaction; Mössbauer spectroscopy; Electrical response (Canevali, C. (100) 228)
- Ethane
Porous silicon; Hydrocarbons groups; Gas-sensor; Ethylene; Propane (Belhousse, S. (100) 250)
- Ethanol detector
HW-CVD technique; Porous silicon (Ferreira, I. (100) 236)
- Ethylene
Porous silicon; Hydrocarbons groups; Gas-sensor; Ethane; Propane (Belhousse, S. (100) 250)
- Exhaust constituent sensors
Calorimetric hydrocarbon sensors; Selective CO oxidation catalyst (Wu, M.-C. (100) 291)
- Fast oxygen sensor
Pressure modulation spectroscopy; Cerium oxide (Shin, W. (100) 395)
- Fast response
Oxygen gas sensor; Ceria; Thick film; Dynamic method; Response time (Izu, N. (100) 411)
- FET
Biosensor; ZnO; ZnMgO; MBE; Nitrogen doping (Ogata, K. (100) 209)
- Fiber optic sensors
Multiplexing of sensors; Chirped pulses (Breglio, G. (100) 147)
- Fiber optic
Surface plasmon resonance, SPR; Dip-probes (Obando, L.A. (100) 439)
- Films
Polymer/inorganic composite; Sol-gel; Nanostructure (Chen, W. (100) 195)
- Flexible change of structure
Dual wavelength photo-thermal etching; Agar microchamber; 1480/1064 nm infrared focused beam (Hattori, A. (100) 455)
- Fluorescence
DNA separation; Single-photon; Avalanche diode (Rech, I. (100) 158)
- Fluoropolymer
Gold; Palladium; Nanoparticle; Swelling; Sensor (Cioffi, N. (100) 9)
- FTIR spectroscopy
Porous silicon; Gas sensor; Adsorption; Conductivity (Geobaldo, F. (100) 205)
- FTIR spectroscopy
Porous silicon; Surface functionalisation; Alkenes; Hydrides (Geobaldo, F. (100) 29)
- Gallium oxide
Gas sensor; Hydrogen; Schottky diode (Trinchi, A. (100) 94)
- Gas sensor
Hydrogen; Schottky diode; Gallium oxide (Trinchi, A. (100) 94)
- Gas sensor
Porous silicon; Adsorption; FTIR spectroscopy; Conductivity (Geobaldo, F. (100) 205)
- Gas sensor
Porous silicon; Polar molecules; Alcohol substances (Barillaro, G. (100) 185)
- Gas sensor
Porous silicon; Poly-silicon (Irjaji zad, A. (100) 341)
- Gas sensors
Chalcogenide semiconductors; NO₂; Temperature; Annealing (Tsiu-lyanu, D. (100) 380)
- Gas sensor
Screen-printing; Tin dioxide; Tungsten trioxide; Bismuth and copper oxides (Ivanov, P. (100) 221)

- Gas sensor
Titanium dioxide; Anatase; Lanthanum; Copper; CO (Ruiz, A.M. (100) 256)
- Gas sensor
WO₃; Ozone; Thin films; Reactive sputtering (Bendahan, M. (100) 320)
- Gas sensor
Zinc oxide; Microstructure; Adsorption (Chaabouni, F. (100) 202)
- Gas sensor
Zinc oxide; NO₂ detection; Low working temperature (Baratto, C. (100) 261)
- Gas-sensor
Porous silicon; Hydrocarbons groups; Ethylene; Ethane; Propane (Belhousse, S. (100) 250)
- Glucose dehydrogenase
PQQ; Nafion; Biosensor (Malinauskas, A. (100) 387)
- Gold
Palladium; Nanoparticle; Fluoropolymer; Swelling; Sensor (Cioffi, N. (100) 9)
- Hexamethyldisilazane
SnO₂; RTA; Hollow cathode discharge (Popova, L. (100) 352)
- Hollow cathode discharge
SnO₂; RTA; Hexamethyldisilazane (Popova, L. (100) 352)
- Humidity sensor
Composite material; Nano SiO₂; Poly(AMPS); Impedance analysis (Su, P.-G. (100) 417)
- Humidity sensors
Nanostructured carbon; Supersonic cluster beam deposition (Bruzzi, M. (100) 173)
- Humidity sensors
Porous SiC; Al electrodes (Connolly, E.J. (100) 216)
- HW-CVD technique
Porous silicon; Ethanol detector (Ferreira, I. (100) 236)
- Hybrid material
Ordered mesophase; Dye (Borello, L. (100) 107)
- Hydrides
Porous silicon; Surface functionalisation; Alkenes; FTIR spectroscopy (Geobaldo, F. (100) 29)
- Hydrocarbons groups
Porous silicon; Gas-sensor; Ethylene; Ethane; Propane (Belhousse, S. (100) 250)
- Hydrogen sensor
Pd thin film; Optical switching; Plasma sputtering; Nano-composite (Fedtke, P. (100) 151)
- Hydrogen
Gas sensor; Schottky diode; Gallium oxide (Trinchi, A. (100) 94)
- IgE
Surface plasmon resonance; Quartz crystal microbalance; Allergy (Su, X. (100) 309)
- Impedance analysis
Humidity sensor; Composite material; Nano SiO₂; Poly(AMPS) (Su, P.-G. (100) 417)
- Imprinting
Double templates; Solvent detection; PAH detection; Surface imprinting; Virus analysis (Dickert, F.L. (100) 112)
- Indirect competitive immunoreaction
Landmine; SPR immunosensor; 2,4,6-Trinitrophenol; Anti-TNP antibody (Shankaran, D.R. (100) 450)
- Injection moulding
Surface plasmon; Diffractive optics; Biosensor; Polymers (Thirstrup, C. (100) 298)
- Integrated optical sensor
Refractometer; Silicon technology; ARROW (Bernini, R. (100) 143)
- Integrated optics
Microsensors; Mach-Zehnder interferometer (Bernini, R. (100) 72)
- Kinetics of corrosion
Optical fibre; Aluminium film; Potentiometric measurements (Benounis, M. (100) 1)
- Label-free piezoelectric immunosensor
Characteristics; *Pseudomonas aeruginosa* detection; Antibody and strain specificity (Kim, N. (100) 432)
- LaMnO₃
Thin oxide films; Atomic and electronic structure; Ab initio and semi-empirical calculations (Heifets, E. (100) 81)
- Landmine
SPR immunosensor; 2,4,6-Trinitrophenol; Anti-TNP antibody; Indirect competitive immunoreaction (Shankaran, D.R. (100) 450)
- Lanthanum
Titanium dioxide; Anatase; Copper; CO; Gas sensor (Ruiz, A.M. (100) 256)
- Liquid control
Microvalve; Surface tension; Liquid-triggered (Melin, J. (100) 463)
- Liquid-triggered
Microvalve; Surface tension; Liquid control (Melin, J. (100) 463)
- Low power
Micromachined gas sensor; Dynamic operation; Temperature cycling; Virtual multisensor system (Ankara, Z. (100) 240)
- Low working temperature
Zinc oxide; Gas sensor; NO₂ detection (Baratto, C. (100) 261)
- Low-dimensional silicon structure
Porous silicon; Optical sensors; Microcavities (De Stefano, L. (100) 168)
- Mach-Zehnder interferometer
Integrated optics; Microsensors (Bernini, R. (100) 72)
- MBE
FET; Biosensor; ZnO; ZnMgO; Nitrogen doping (Ogata, K. (100) 209)
- Metal doped
Pulsed laser deposition; Plasma; Tungsten oxide; Sensor (Kawasaki, H. (100) 266)
- Metallophthalocyanine
Optochemical sensors; VOCs (Spadavecchia, J. (100) 135)
- Metallo-phthalocyanines
Metallo-porphyrin; Thin films; Optical sensors (Spadavecchia, J. (100) 88)
- Metallo-porphyrin
Metallo-phthalocyanines; Thin films; Optical sensors (Spadavecchia, J. (100) 88)
- Micro T-mixer
Microfluidics; Rapid mixing; Secondary flow; Vortex generation (Wong, S.H. (100) 359)
- Microcavities
Porous silicon; Optical sensors; Low-dimensional silicon structure (De Stefano, L. (100) 168)
- Microcavity
Porous silicon multilayer; Coupled Fabry-Perot; Nano-fluidics (Volk, J. (100) 163)
- Microfluidics
Micro T-mixer; Rapid mixing; Secondary flow; Vortex generation (Wong, S.H. (100) 359)
- Micromachined gas sensor
Low power; Dynamic operation; Temperature cycling; Virtual multisensor system (Ankara, Z. (100) 240)
- Microsensors
Integrated optics; Mach-Zehnder interferometer (Bernini, R. (100) 72)
- Microstructure
Zinc oxide; Adsorption; Gas sensor (Chaabouni, F. (100) 202)
- Microvalve
Surface tension; Liquid control; Liquid-triggered (Melin, J. (100) 463)
- Modified electrode
Reduced glutathione; TTF-TCNQ (Calvo-Marzal, P. (100) 333)

- MoO₃:Ti
CS₂; (CH₃)₂S; TiO₂:Mo; TiO + WO₃; TiO:W (Comini, E. (100) 41)
- Mössbauer spectroscopy
Nanocrystalline SnO₂; NO interaction; EPR spectroscopy; Electrical response (Canevali, C. (100) 228)
- Multiplexing of sensors
Fiber optic sensors; Chirped pulses (Breglio, G. (100) 147)
- Nafion
Glucose dehydrogenase; PQQ; Biosensor (Malinauskas, A. (100) 387)
- Nano SiO₂
Humidity sensor; Composite material; Poly(AMPS); Impedance analysis (Su, P.-G. (100) 417)
- Nano-composite
Hydrogen sensor; Pd thin film; Optical switching; Plasma sputtering (Fedtke, P. (100) 151)
- Nanocrystalline SnO₂
NO interaction; EPR spectroscopy; Mössbauer spectroscopy; Electrical response (Canevali, C. (100) 228)
- Nano-fluidics
Porous silicon multilayer; Microcavity; Coupled Fabry-Perot (Volk, J. (100) 163)
- Nanoparticle
Gold; Palladium; Fluoropolymer; Swelling; Sensor (Cioffi, N. (100) 9)
- Nanostructured carbon
Supersonic cluster beam deposition; Humidity sensors (Bruzzi, M. (100) 173)
- Nanostructured thin films
VOC sensors; TiO₂; Supersonic cluster beam deposition (Taurino, A.M. (100) 177)
- Nanostructure
Polymer/inorganic composite; Films; Sol-gel (Chen, W. (100) 195)
- Nanotubules
Non-conventional conducting polymers; Chemical sensors; Electrochemistry (Curulli, A. (100) 65)
- α -Naphtholphthalein
Optical CO₂ sensor; pH indicator; Porphyrin; Colorimetric change (Amao, Y. (100) 347)
- Nickel oxide
Zinc oxide; Rectifying junction; Electrical properties (Nel, J.M. (100) 270)
- Nitrogen doping
FET; Biosensor; ZnO; ZnMgO; MBE (Ogata, K. (100) 209)
- 1480/1064 nm infrared focused beam
Dual wavelength photo-thermal etching; Agar microchamber; Flexible change of structure (Hattori, A. (100) 455)
- NO₂ detection
Zinc oxide; Gas sensor; Low working temperature (Baratto, C. (100) 261)
- NO₂ gas sensor
Tungsten oxide; Thick film (Guidi, V. (100) 277)
- NO interaction
Nanocrystalline SnO₂; EPR spectroscopy; Mössbauer spectroscopy; Electrical response (Canevali, C. (100) 228)
- NO₂
Chalcogenide semiconductors; Gas sensors; Temperature; Annealing (Tsiulyanu, D. (100) 380)
- Non-conventional conducting polymers
Nanotubules; Chemical sensors; Electrochemistry (Curulli, A. (100) 65)
- Olive oil
Conducting polymers; Sensor; Electronic nose (Guadarrama, A. (100) 60)
- Optical CO₂ sensor
pH indicator; Porphyrin; α -Naphtholphthalein; Colorimetric change (Amao, Y. (100) 347)
- Optical fiber
Surface plasmon resonance; Absorption; Sensor (Sharma, A.K. (100) 423)
- Optical fibre
Kinetics of corrosion; Aluminium film; Potentiometric measurements (Benounis, M. (100) 1)
- Optical guided modes
Surface plasmons; Optical sensors; Temperature sensors (Velinov, T. (100) 325)
- Optical sensor
Congo Red; pH indicator; Porous silicon; Waveguides (Rivolo, P. (100) 99)
- Optical sensor
Porous silicon; Photoluminescence quenching (Chvojka, T. (100) 246)
- Optical sensors
Metallo-phthalocyanines; Metallo-porphyrin; Thin films (Spadavecchia, J. (100) 88)
- Optical sensors
Porous silicon; Microcavities; Low-dimensional silicon structure (De Stefano, L. (100) 168)
- Optical sensors
Surface plasmons; Temperature sensors; Optical guided modes (Velinov, T. (100) 325)
- Optical sensors
Thin films; SPR; Colloidal nanocrystals (Manera, M.G. (100) 75)
- Optical switching
Hydrogen sensor; Pd thin film; Plasma sputtering; Nano-composite (Fedtke, P. (100) 151)
- Optochemical sensors
VOCs; Metallophthalocyanine (Spadavecchia, J. (100) 135)
- Ordered mesophase
Dye; Hybrid material (Borello, L. (100) 107)
- Oxygen annealing
Carbon nanotubes; Sensors; Raman spectroscopy; XPS (Valentini, L. (100) 33)
- Oxygen gas sensor
Ceria; Fast response; Thick film; Dynamic method; Response time (Izu, N. (100) 411)
- Oxygen sensor
Solid-state reference; Ceria-zirconia; Automotive applications (Rajabbeigi, N. (100) 139)
- Ozone
WO₃; Gas sensor; Thin films; Reactive sputtering (Bendahan, M. (100) 320)
- PAH detection
Imprinting; Double templates; Solvent detection; Surface imprinting; Virus analysis (Dickert, F.L. (100) 112)
- Palladium
Gold; Nanoparticle; Fluoropolymer; Swelling; Sensor (Cioffi, N. (100) 9)
- Pd thin film
Hydrogen sensor; Optical switching; Plasma sputtering; Nano-composite (Fedtke, P. (100) 151)
- Pd-poly-ynes
RefLEXAFS (D'Acapito, F. (100) 131)
- pH indicator
Congo Red; Porous silicon; Waveguides; Optical sensor (Rivolo, P. (100) 99)
- pH indicator
Optical CO₂ sensor; Porphyrin; α -Naphtholphthalein; Colorimetric change (Amao, Y. (100) 347)
- Photoluminescence quenching
Porous silicon; Optical sensor (Chvojka, T. (100) 246)
- Plasma sputtering
Hydrogen sensor; Pd thin film; Optical switching; Nano-composite (Fedtke, P. (100) 151)

- Plasma
Pulsed laser deposition; Tungsten oxide; Metal doped; Sensor (Kawasaki, H. (100) 266)
- Platinum micromachining
SnO₂ sensor; Sol-gel; Thin film; Spin-coating; Crystallization; Surface features (Esfandyarpour, B. (100) 190)
- Polar molecules
Gas sensor; Porous silicon; Alcohol substances (Barillaro, G. (100) 185)
- Poly(AMPS)
Humidity sensor; Composite material; Nano SiO₂; Impedance analysis (Su, P.-G. (100) 417)
- Polymer composite
Bragg reflector; Swelling; Vapor solvent detection (Convertino, A. (100) 212)
- Polymer composites
Carbon nanostructures; Thin film gas sensors (Quercia, L. (100) 22)
- Polymer/inorganic composite
Films; Sol-gel; Nanostructure (Chen, W. (100) 195)
- Polymeric HMDSO
STW resonator; Relative humidity sensor; a-C:H films (Bruno, P. (100) 126)
- Polymers
Surface plasmon; Diffractive optics; Biosensor; Injection moulding (Thirstrup, C. (100) 298)
- Poly-silicon
Porous silicon; Gas sensor (Iraji zad, A. (100) 341)
- Porous SiC
Humidity sensors; Al electrodes (Connolly, E.J. (100) 216)
- Porous silicon multilayer
Microcavity; Coupled Fabry-Perot; Nano-fluidics (Volk, J. (100) 163)
- Porous silicon
Congo Red; pH indicator; Waveguides; Optical sensor (Rivolo, P. (100) 99)
- Porous silicon
Gas sensor; Adsorption; FTIR spectroscopy; Conductivity (Geobaldo, F. (100) 205)
- Porous silicon
Gas sensor; Polar molecules; Alcohol substances (Barillaro, G. (100) 185)
- Porous silicon
HW-CVD technique; Ethanol detector (Ferreira, I. (100) 236)
- Porous silicon
Hydrocarbons groups; Gas-sensor; Ethylene; Ethane; Propane (Belhousse, S. (100) 250)
- Porous silicon
Optical sensors; Microcavities; Low-dimensional silicon structure (De Stefano, L. (100) 168)
- Porous silicon
Photoluminescence quenching; Optical sensor (Chvojka, T. (100) 246)
- Porous silicon
Poly-silicon; Gas sensor (Iraji zad, A. (100) 341)
- Porous silicon
Surface functionalisation; Alkenes; FTIR spectroscopy; Hydrides (Geobaldo, F. (100) 29)
- Porphyrin
Optical CO₂ sensor; pH indicator; α -Naphtholphthalein; Colorimetric change (Amao, Y. (100) 347)
- Potentiometric measurements
Optical fibre; Kinetics of corrosion; Aluminium film (Benounis, M. (100) 1)
- Potentiometry
Beryllium-selective electrode; PVC membrane (Ganjali, M.R. (100) 315)
- PQQ
Glucose dehydrogenase; Nafion; Biosensor (Malinauskas, A. (100) 387)
- Pressure modulation spectroscopy
Fast oxygen sensor; Cerium oxide (Shin, W. (100) 395)
- Propane
Porous silicon; Hydrocarbons groups; Gas-sensor; Ethylene; Ethane (Belhousse, S. (100) 250)
- Pseudomonas aeruginosa* detection
Characteristics; Label-free piezoelectric immunosensor; Antibody and strain specificity (Kim, N. (100) 432)
- Pulsed laser deposition
Plasma; Tungsten oxide; Metal doped; Sensor (Kawasaki, H. (100) 266)
- PVC membrane
Beryllium-selective electrode; Potentiometry (Ganjali, M.R. (100) 315)
- Quartz crystal microbalance
Surface plasmon resonance; IgE; Allergy (Su, X. (100) 309)
- Raman spectroscopy
Carbon nanotubes; Sensors; Oxygen annealing; XPS (Valentini, L. (100) 33)
- Rapid mixing
Micro T-mixer; Microfluidics; Secondary flow; Vortex generation (Wong, S.H. (100) 359)
- Reactive sputtering
WO₃; Gas sensor; Ozone; Thin films (Bendahan, M. (100) 320)
- Rectifying junction
Nickel oxide; Zinc oxide; Electrical properties (Nel, J.M. (100) 270)
- Reduced glutathione
Modified electrode; TTF-TCNQ (Calvo-Marzal, P. (100) 333)
- RefLEXAFS
Pd-poly-ynes (D'Acapito, F. (100) 131)
- Refractometer
Integrated optical sensor; Silicon technology; ARROW (Bernini, R. (100) 143)
- Reichardt's dye
SBA-15; Ammonia (Fiorilli, S. (100) 103)
- Relative humidity sensor
STW resonator; Polymeric HMDSO; a-C:H films (Bruno, P. (100) 126)
- Response time
Oxygen gas sensor; Ceria; Fast response; Thick film; Dynamic method (Izu, N. (100) 411)
- RTA
SnO₂; Hexamethyldisilazane; Hollow cathode discharge (Popova, L. (100) 352)
- RT-PCR
Spectrometer; Discrete channels fluorescence detection; Continuous wavelength detection (Lee, D.-S. (100) 401)
- SAW chemical sensors
Carbon nanotubes; Vapour sensors; Selectivity (Penza, M. (100) 47)
- SBA-15
Reichardt's dye; Ammonia (Fiorilli, S. (100) 103)
- Scanning tunnelling spectroscopy
Schottky barrier; Surface states (Malagù, C. (100) 283)
- Schottky barrier
Surface states; Scanning tunnelling spectroscopy (Malagù, C. (100) 283)
- Schottky diode
Gas sensor; Hydrogen; Gallium oxide (Trinchi, A. (100) 94)
- Screen-printing
Gas sensor; Tin dioxide; Tungsten trioxide; Bismuth and copper oxides (Ivanov, P. (100) 221)
- Secondary flow
Micro T-mixer; Microfluidics; Rapid mixing; Vortex generation (Wong, S.H. (100) 359)
- Selective CO oxidation catalyst
Calorimetric hydrocarbon sensors; Exhaust constituent sensors (Wu, M.-C. (100) 291)

- Selectivity
Carbon nanotubes; SAW chemical sensors; Vapour sensors (Penza, M. (100) 47)
- Sensor
Conducting polymers; Olive oil; Electronic nose (Guadarrama, A. (100) 60)
- Sensor
Gold; Palladium; Nanoparticle; Fluoropolymer; Swelling (Cioffi, N. (100) 9)
- Sensor
Optical fiber; Surface plasmon resonance; Absorption (Sharma, A.K. (100) 423)
- Sensor
Pulsed laser deposition; Plasma; Tungsten oxide; Metal doped (Kawasaki, H. (100) 266)
- Sensors
Carbon nanotubes; Oxygen annealing; Raman spectroscopy; XPS (Valentini, L. (100) 33)
- Silicon technology
Integrated optical sensor; Refractometer; ARROW (Bernini, R. (100) 143)
- Single wall carbon nanotube paste electrodes
Electrochemical biosensors (Valentini, F. (100) 117)
- Single-photon
DNA separation; Fluorescence; Avalanche diode (Rech, I. (100) 158)
- SnO₂ sensor
Sol-gel; Thin film; Platinum micromachining; Spin-coating; Crystallization; Surface features (Esfandyarpour, B. (100) 190)
- SnO₂
RTA; Hexamethyldisilazane; Hollow cathode discharge (Popova, L. (100) 352)
- Sol-gel
Polymer/inorganic composite; Films; Nanostructure (Chen, W. (100) 195)
- Sol-gel
SnO₂ sensor; Thin film; Platinum micromachining; Spin-coating; Crystallization; Surface features (Esfandyarpour, B. (100) 190)
- Solid-state reference
Oxygen sensor; Ceria-zirconia; Automotive applications (Rajabbeigi, N. (100) 139)
- Solvent detection
Imprinting; Double templates; PAH detection; Surface imprinting; Virus analysis (Dickert, F.L. (100) 112)
- Spectrometer
RT-PCR; Discrete channels fluorescence detection; Continuous wavelength detection (Lee, D.-S. (100) 401)
- Spin-coating
SnO₂ sensor; Sol-gel; Thin film; Platinum micromachining; Crystallization; Surface features (Esfandyarpour, B. (100) 190)
- SPR immunosensor
Landmine; 2,4,6-Trinitrophenol; Anti-TNP antibody; Indirect competitive immunoreaction (Shankaran, D.R. (100) 450)
- SPR
Thin films; Optical sensors; Colloidal nanocrystals (Manera, M.G. (100) 75)
- STW resonator
Relative humidity sensor; Polymeric HMDSO; a-C:H films (Bruno, P. (100) 126)
- Supersonic cluster beam deposition
Nanostructured carbon; Humidity sensors (Bruzzi, M. (100) 173)
- Supersonic cluster beam deposition
VOC sensors; Nanostructured thin films; TiO₂ (Taurino, A.M. (100) 177)
- Surface features
SnO₂ sensor; Sol-gel; Thin film; Platinum micromachining; Spin-coating; Crystallization (Esfandyarpour, B. (100) 190)
- Surface functionalisation
Porous silicon; Alkenes; FTIR spectroscopy; Hydrides (Geobaldo, F. (100) 29)
- Surface imprinting
Imprinting; Double templates; Solvent detection; PAH detection; Virus analysis (Dickert, F.L. (100) 112)
- Surface plasmon resonance, SPR
Fiber optic; Dip-probes (Obando, L.A. (100) 439)
- Surface plasmon resonance
Optical fiber; Absorption; Sensor (Sharma, A.K. (100) 423)
- Surface plasmon resonance
Quartz crystal microbalance; IgE; Allergy (Su, X. (100) 309)
- Surface plasmon
Diffractive optics; Biosensor; Injection moulding; Polymers (Thirstrup, C. (100) 298)
- Surface plasmons
Optical sensors; Temperature sensors; Optical guided modes (Velinov, T. (100) 325)
- Surface states
Schottky barrier; Scanning tunnelling spectroscopy (Malagù, C. (100) 283)
- Surface tension
Microvalve; Liquid control; Liquid-triggered (Melin, J. (100) 463)
- Swelling
Bragg reflector; Polymer composite; Vapor solvent detection (Conver-tino, A. (100) 212)
- Swelling
Gold; Palladium; Nanoparticle; Fluoropolymer; Sensor (Cioffi, N. (100) 9)
- Temperature cycling
Micromachined gas sensor; Low power; Dynamic operation; Virtual multisensor system (Ankara, Z. (100) 240)
- Temperature sensors
Surface plasmons; Optical sensors; Optical guided modes (Velinov, T. (100) 325)
- Temperature
Chalcogenide semiconductors; Gas sensors; NO₂; Annealing (Tsiu-lyanu, D. (100) 380)
- Thick film
Oxygen gas sensor; Ceria; Fast response; Dynamic method; Response time (Izu, N. (100) 411)
- Thick film
Tungsten oxide; NO₂ gas sensor (Guidi, V. (100) 277)
- Thin film gas sensors
Carbon nanostructures; Polymer composites (Quercia, L. (100) 22)
- Thin films
Metallo-phthalocyanines; Metallo-porphyrin; Optical sensors (Spada-vecchia, J. (100) 88)
- Thin film
SnO₂ sensor; Sol-gel; Platinum micromachining; Spin-coating; Crystallization; Surface features (Esfandyarpour, B. (100) 190)
- Thin films
Optical sensors; SPR; Colloidal nanocrystals (Manera, M.G. (100) 75)
- Thin films
WO₃; Gas sensor; Ozone; Reactive sputtering (Bendahan, M. (100) 320)
- Thin oxide films
LaMnO₃; Atomic and electronic structure; Ab initio and semi-empirical calculations (Heifets, E. (100) 81)
- Tin dioxide
Gas sensor; Screen-printing; Tungsten trioxide; Bismuth and copper oxides (Ivanov, P. (100) 221)
- TiO + WO₃
CS₂; (CH₃)₂S; TiO₂:Mo; MoO₃:Ti; TiO:W (Comini, E. (100) 41)
- TiO₂:Mo
CS₂; (CH₃)₂S; MoO₃:Ti; TiO + WO₃; TiO:W (Comini, E. (100) 41)

TiO:W

CS₂; (CH₃)₂S; TiO₂:Mo; MoO₃:Ti; TiO + WO₃ (Comini, E. (100) 41)

TiO₂

VOC sensors; Nanostructured thin films; Supersonic cluster beam deposition (Taurino, A.M. (100) 177)

Titanium dioxide

Anatase; Lanthanum; Copper; CO; Gas sensor (Ruiz, A.M. (100) 256)

2,4,6-Trinitrophenol

Landmine; SPR immunosensor; Anti-TNP antibody; Indirect competitive immunoreaction (Shankaran, D.R. (100) 450)

TTF-TCNQ

Reduced glutathione; Modified electrode (Calvo-Marzal, P. (100) 333)

Tungsten oxide

Pulsed laser deposition; Plasma; Metal doped; Sensor (Kawasaki, H. (100) 266)

Tungsten oxide

Thick film; NO₂ gas sensor (Guidi, V. (100) 277)

Tungsten trioxide

Gas sensor; Screen-printing; Tin dioxide; Bismuth and copper oxides (Ivanov, P. (100) 221)

Vapor solvent detection

Bragg reflector; Polymer composite; Swelling (Convertino, A. (100) 212)

Vapour sensors

Carbon nanotubes; SAW chemical sensors; Selectivity (Penza, M. (100) 47)

Virtual multisensor system

Micromachined gas sensor; Low power; Dynamic operation; Temperature cycling (Ankara, Z. (100) 240)

Virus analysis

Imprinting; Double templates; Solvent detection; PAH detection; Surface imprinting (Dickert, F.L. (100) 112)

VOC sensors

Nanostructured thin films; TiO₂; Supersonic cluster beam deposition (Taurino, A.M. (100) 177)

VOCs

Optochemical sensors; Metallophthalocyanine (Spadavecchia, J. (100) 135)

Vortex generation

Micro T-mixer; Microfluidics; Rapid mixing; Secondary flow (Wong, S.H. (100) 359)

Waveguides

Congo Red; pH indicator; Porous silicon; Optical sensor (Rivolo, P. (100) 99)

WO₃

Gas sensor; Ozone; Thin films; Reactive sputtering (Bendahan, M. (100) 320)

XPS

Carbon nanotubes; Sensors; Oxygen annealing; Raman spectroscopy (Valentini, L. (100) 33)

Zinc oxide

Gas sensor; NO₂ detection; Low working temperature (Baratto, C. (100) 261)

Zinc oxide

Microstructure; Adsorption; Gas sensor (Chaabouni, F. (100) 202)

Zinc oxide

Nickel oxide; Rectifying junction; Electrical properties (Nel, J.M. (100) 270)

ZnMgO

FET; Biosensor; ZnO; MBE; Nitrogen doping (Ogata, K. (100) 209)

ZnO

FET; Biosensor; ZnMgO; MBE; Nitrogen doping (Ogata, K. (100) 209)